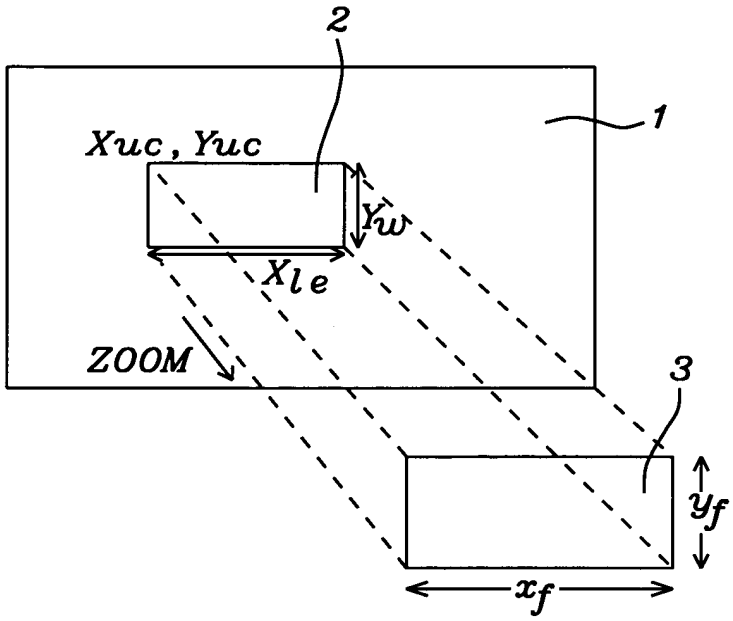

FIG. 1

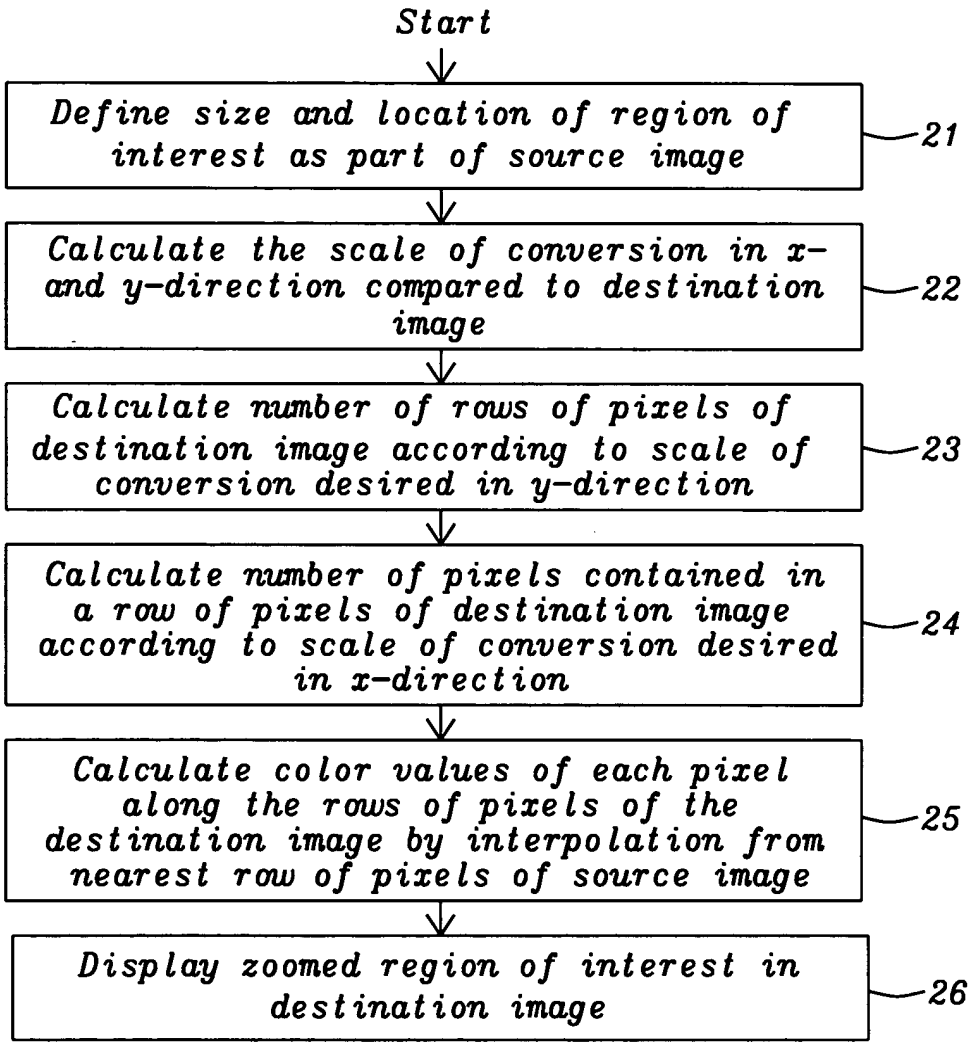
Start
Define size and location of region of interest as part of source image
21
Calculate the scale of conversion in x- and y-direction compared to destination image
22
Calculate number of rows of pixels of destination image according to scale of conversion desired in y-direction
23
Calculate number of pixels contained in a row of pixels of destination image according to scale of conversion desired in x-direction
24
Calculate color values of each pixel along the rows of pixels of the destination image by interpolation from nearest row of pixels of source image
25
Display zoomed region of interest in destination image
26

FIG. 2

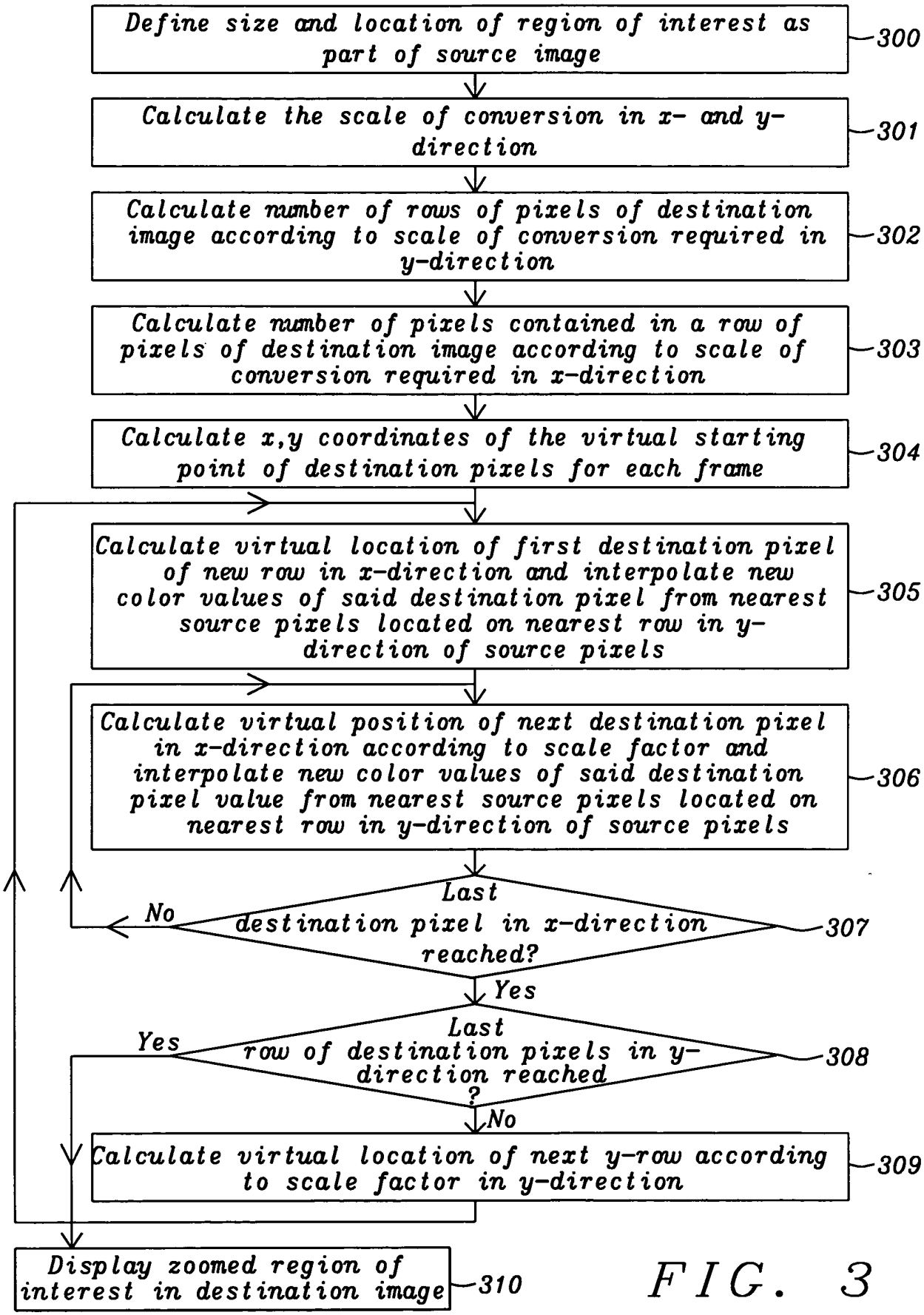
Define size and location of region of interest as part of source image
300
Calculate the scale of conversion in x- and y-direction
301
Calculate number of rows of pixels of destination image according to scale of conversion required in y-direction
302
Calculate number of pixels contained in a row of pixels of destination image according to scale of conversion required in x-direction
303
Calculate x,y coordinates of the virtual starting point of destination pixels for each frame
304
Calculate virtual location of first destination pixel of new row in x-direction and interpolate new color values of said destination pixel from nearest source pixels located on nearest row in y-direction of source pixels
305
Calculate virtual position of next destination pixel in x-direction according to scale factor and interpolate new color values of said destination pixel value from nearest source pixels located on nearest row in y-direction of source pixels
306
Last destination pixel in x-direction reached?
307
No
Yes
Last row of destination pixels in y-direction reached ?
308
Yes
No
Calculate virtual location of next y-row according to scale factor in y-direction
309
Display zoomed region of interest in destination image
310

FIG. 3